Claims

1. A device (1) for air distribution in the interior (2) of a vehicle having a ventilating element (4) for generating an air flow (L) and having at least one flow duct (6) connected to the ventilating element (4) together with a plurality of air discharge elements (10) leading into the interior (2), **characterized in that** the flow duct (6) takes the form of a common multi-chamber duct (16) for a plurality of air discharge elements (10) and has a plurality of outlet openings (8) which open directly into the air discharge elements (10).

2. The device as claimed in claim 1, characterized in that the multi-chamber duct (16) takes the form of a two-chamber duct (24).

3. The device as claimed in claim 1 or 2, characterized in that the multi-chamber duct (16) is sub-divided into a plurality of chamber ducts (20).

4. The device as claimed in claim 3, characterized in that an individual chamber duct (20) takes the form of a two-chamber duct (24) or an individual mixing chamber duct (26).

5. The device as claimed in claim 3 or 4, characterized in that each chamber duct (20) opens out into an associated air discharge element (10).

6. The device as claimed in any one of claims 3 to 5, characterized in that one chamber duct (20) takes the form of a cold flow duct (K) and another takes the form of a warm flow duct (W).

7. The device as claimed in any one of the preceding claims, characterized in that the respective outlet opening (8) comprises at least one regulating element (12) and/or a mixing element (14).

8. The device as claimed in any one of the preceding claims, characterized in that the flow duct (6) is provided with at least one regulating element (12).

9. The device as claimed in any one of the preceding claims, characterized in that a measuring sensor for registering relevant operating data is provided on at least one air discharge element (10).

10. The device as claimed in any one of the preceding claims, characterized in that the multi-chamber duct (16) is arranged running longitudinally and/or transversely along a vehicle shell.

11. The device as claimed in any one of the preceding claims, characterized in that the multi-channel duct (16) takes the form of a ring main.

12. A flow duct (6) for use in a device (1) for air distribution in a vehicle as claimed in any one of claims 1 to 11, **characterized by** a duct wall (w, w1 to w24) of an at least partially deformable material, which is shaped and detachably fixed, forming a hose-like hollow space (H).

13. The flow duct as claimed in claim 12, characterized in that the material is fixed to a dimensionally stable surface (32), forming a hollow space (H).

14. The flow duct as claimed in claim 12 or 13, characterized in that the material itself is formed like a hose.

15. The flow duct as claimed in any one of the preceding claims, characterized in that the deformable material takes the form of a film-like material.

16. The flow duct as claimed in any one of the preceding claims, characterized in that the deformable material takes the form of a fabric-like material.

17. The flow duct as claimed in any one of the preceding claims, characterized in that the duct wall (w) is fixed in the manner of a clip.

18. The flow duct as claimed in any one of the preceding claims, characterized in that the deformable material is provided with a profile (42)

19. The flow duct as claimed in any one of the preceding claims, characterized in that the duct wall (w, w1 to w24) is formed from a plurality of layered films, which are arranged on the dimensionally stable surface (32), forming a hollow space (H).

20. The flow duct as claimed in claim 19, characterized in that the layered films are additionally enclosed by a solid material.

21. The flow duct as claimed in any one of the preceding claims, characterized in that an elastic, deformable and/or foldable dividing wall (28) is arranged between two chambers (20) of a multi-chamber duct (16).

22. A method for air distribution in the interior (2) of a vehicle, **characterized in that** an overall air flow (L) is generated by means of a ventilating element (4) and delivered to a flow duct (6) connected to the ventilating element (4), an associated partial air flow (T) in each case being drawn from the overall air flow (L) by way of a plurality of air discharge elements (10) opening into the interior (2).

23. The method as claimed in claim 22, characterized in that the overall air flow (L) is made up of the sum of all partial air flows (T).

24. The method as claimed in claim 22, characterized in that the overall air flow (L) is made up of a corresponding number of partial air flows (T) varying as a function of the time and/or conditions.